British Journal of Global Ecology and Sustainable Development
Volume-10, Nov., 2022
ISSN (E): 2754-9291

CARE AND FEEDING OF CARP FISH

Qo'ziyeva Sahobat O'ktamovna
PhD. Teacher of the Department of methods of Teaching
Biology of Jizzakh State Pedagogical University

Ortiqova Mohira Izbosarovna
Teacher of the Department of Methods of Teaching
Biology of Jizzakh State Pedagogical University

Mamanova Gòzal Baxtiyor qizi
Department of Genetics of the Faculty of Biology of the
National University of Uzbekistan

Annotation
In the closed circulating water supply unit (CWW) mainly used balanced soft feed developed by factories specializing in the production of fish feed. These factories produce soft feed for a specific species. There is no natural feed base of the fishing basin in YSTQ, only artificial feeds are used to provide nutrients necessary for the development of fish. Of course, for all types of fish, the industry produces soft bait, in any case, they can be replaced if several species are close to each other according to their ecological characteristics, for example, the soft bait produced for rainbow trout can be used by other predatory fish.

Keywords: nickname fish, olabuga, forel, carp fish, monoculture, polyculture, granule, protein, klechatka, zola.

Main Part
In the closed circulating water supply device (YSTQ), the fish maintenance conditions are controlled by the fisherman, which makes it possible to expand the list of fish species that can be bred. Since the list of fish can be fundamentally different from each other in different countries, it is formed in many ways without attachment to the requirements of the local market. And the acclimatization of new promising species in aquaculture is a link to the feed provided. The ystq has a wide range of options for expanding the list of fish, since they are not connected by the flow of water from the surface of the Earth, which means that the new species does not have access to local basins and does not have a negative effect on the local economic system of the nearby huvzas. Indeed, the requirements of the Convention "on biodiversity", adopted in 1995 and added to Uzbekistan in 2008, are also aimed at preventing the negative effects of new species on the local fauna.
The types of fish grown in different countries are of great importance for fishermen of Uzbekistan. Such fish species include several species of Sturgeon (channel catfish, African catfish, Asian catfish and common catfish), several Trout (American,

Australian Trout), tilyapia. Osyotr fish can also be shown from other aquatic animals (shrimp, crayfish, crabs, oysters, etc.). The main object of cultivation in cold conditions of the ystq is the rainbow color forel, it is also possible to grow species of bare fish.

Fishermen can grow fish objects in the conditions of the YSTQ in monoculture, as well as in polyculture. For fish living in the ystq aquifers (pools are not very deep, around 1 meter), it is better to use dry, floating extruded baits in the form of granules. In this case, it is easy to observe the food being eaten, it is better to exclude the inedible feed from the fishing pond. It is necessary that the size of the granules corresponds to the size of the fish, or rather to the size of their oral apparatus. there are granule sizes in the range that are suitable for fish of each size. It is best to use large-sized granules within this range, with the aim of improving the ingestion and reducing waste.

The feed should be kept well until the expiration dates indicated by the manufacturer. During the storage period, the feed is oxidized, which means that the quality deteriorates, the feed can cause poisoning from a particular food. The bait should be stored in cool dark places, it is required to protect the bait bags from rodents and other animals that gnaw and pierce them. Such pests can leave balkim garbage not only without eating valuable baits, which can lead to a violation of the feed and water in the system.

Feed giving separately to the norms. The farms of the famous feed manufacturer have good theoretical developments in such matters as feeding different types of fish, preparing food. Such manufacturers provide detailed information on the norms of feed delivery, depending on the size of the fish recommended along with the feed and the water temperature, in the feed bags, passport, on their own internet sites. And from the fisherman only the following is required:

* Reading and thinking of this information;
• Perform weekly control hunts with the aim of determining the average weight of the fish and accurately determine the biomass of the fish in each pool;
* Selection of granules of Optimal size;
* To calculate the daily norm of feeding with this feed.

For the effective use of baits and good growth of fish, the fisherman will have to follow simple rules. It is better to give the feed several times than once a day, for this it is necessary to divide the daily norm into 4-8 doses and give it at the same time every day. The bait should be scattered throughout the pool over a larger area to catch more fish.

In Europe there are farms producing omukhta feed ishab for popular Catfish: Skcretting, Aller Aqua, DANA Feed, Biomar and others.

From the typical industrial omukhta feed, we can cite as an example the feed of the manufacturer “Aller Aqua”, which is famous in Europe for warm water fish, and indicate its advertising leaflet (Table 1).

As you can see, the protein content in this omukhta feed is 37%. The bottom table lists information on how to feed well with this feed. The table also shows the water

Journal Zone Publishing, Ilford, United Kingdom

temperature and the feed norm given per day without being tied to the size of the fish and the size of the recommended feed pellets.

All 37/12

Application: bait product for carp, catfish and osyotrid fish

Type: fully extruded feed

Granule size: XS, S, M, L-ellipsoid

Ingredients: fish flour and oil, wheat, vegetable oil, oil production plant waste, legumes processing products, vitamins, mineral supplements

Vitamins: A-2500 ME / kg; D-500 ME / kg; E-100 mg/kg

Bottom: 25 kg backpack .

Figure 1. Aller Aqua-omukhta feed for fish

Table 1: balanced feed classification indicators with high productivity.

Indicators	Granules XS, S, M, L
Raw protein, %	37
Raw oil , %	12
carbohydrates, %	31,1
Zala, %	7
Klechatka, %	4
Nitrogen in dry matter, %	6,5
Phosfor in dry matter,%	1,21
Total energy, Kkal/Mj	4660/19,5
Digestible energy, Kkal/Mj	3651/15,3

When breeding carp fish with quality food, it is advisable to give its omukhta baits with a daily diet. When feeding a large number of fish, they must be thoroughly fed. Only then can the intended goal be achieved. Protein food in particular is extremely necessary. The protein substance is extremely necessary for the composition of the food. Fish, like other animals, cannot synthesize certain amino acids that are necessary. Therefore, it is necessary to use quality omukhta feed (Aller Aqua), which

Journal Zone Publishing, Ilford, United Kingdom

contains all the minerals necessary for fish, and it should be given with a daily diet. The daily diet of carp fish is shown in Table 2.

CARP FISH DAILY DIET

Table 2: (%feed compared to fish biomass in a day).

Fish weight , g	Granules size	Water temperature, °C		
		10-15	15-20	20-26
20-50	2 mm	4,50	5,00	7,00
50-100	XS,	3,00	4,00	6,00
100-300	S	2,00	3,50	5,00
300-600	M	1,75	3,00	4,50
600-1000	M-L	1,50	2,50	4,00
1000-2500	L	1,25	2,00	3,00

In order to optimally feed the fish, the fisherman must constantly pay attention to:

1. It is necessary to periodically determine the temperature of the water in the system. Twice a day (every 12 hours) or 4 times (every 6 hours). The data must be recorded in the working log, that is, the fisherman uses the data from the observation log by transferring the temperature determination to the fisherman or laboratory assistant
2. It is necessary to keep a working Journal, which records the movement of a swarm of fish thrown in accordance with the transfer of fish to the pool. The number of permanently dead fish must be recorded in this journal. Thus, the fisherman is required to know exactly the number of fish in the pool, since the norm for feeding fish is determined in relation to their total biomass.
3. It is always necessary to measure no less than 25 fish by voluntarily (without choosing) holding a control catch in each pool on a specific day of the week. Although the Individual measures 10-15 of the fish weighing more than 400 gr.
4. The fisherman determines their biomass by increasing the average weight and number of fish in the pool (taking into account the dead fish).
5. As a result of the activities carried out, the fisherman determines the water temperature, fish size and biomass. The table, on the other hand, is required to find the optimal data on the feed delivery standards and the size of the pellets in a suitable feed, as well as to follow it. For example, a fisherman is taking care of 5,000 fish weighing 400 gr., the temperature in the pool is 22° C. Then the total biomass of fish (0.4x5000) - 2000 kg. The size of the granules to be given is “M”(the label will be written on the bag), in one day the fish is given in the amount of 4.5% of their total biomass, that is 2000*4,5/100 - 90 pounds up kg. The fisherman measures this 90 kg of bait and divides it into 4-8 servings, that is, the bait is given 4-8 times a day from morning to evening.

Recommended in feeding: a complete feed, which contains all the necessary minerals and vitamins for healthy fish growth and is specially designed for cultivated fish

Journal Zone Publishing, Ilford, United Kingdom

species, is necessary for the cultivation of fish in Ystq. Do not replace other animal feeds for fish feed. Different types of fish also have different nutritional requirements, especially the quantity and quality of protein that must be satisfied to optimize growth. Cultivated fish usually feed on 3 to 5 percent of their body weight or all the nutrients they can consume in a small amount of time, such as five minutes. After five minutes, the feed left in the container is rarely consumed, and overeating can seriously reduce the quality of water. A good, quick indication of water quality or disease-related problems is when fish leave food or refuse food. If the fish suddenly stops eating, immediately check for high ammonia levels, low oxygen concentrations, diseases, or other problems. A reduced feeding rate occurs at very high and low water temperatures. Feed on a regular schedule at the same time every day to maximize growth. Eating several times a day more often leads to increased growth rates and increased nutrient conversion efficiency than eating one day. Distribute the feed as evenly as possible to prevent incorrect growth.

There is an understanding in the system that the maximum amount of fish that can be stored (critical standing crop) is the maximum amount of fish biomass. In this case, the conditions of the system do not prevent the growth of fish. The fisherman must constantly try to keep the fish biomass in the system in an amount close to the limit where it can be stored, so that the system can generate maximum efficiency and lead to a decrease in the price of fish. It is clear that for this purpose, fish of different ages and different sizes of a flock of fish in the YSTQ should be cared for separately, that is, in one pool there should be fish ready for sale, and in the other there should be small fish. A swarm of fish of a separate age group is called a “strong swarm”. Today, fishermen distinguish three strategies for storing fish in numbers close to the biomass indicator of the critical amount that can be stored in the YSTQ:

cultivation sequence (sequential rearing)

separation of a swarm of fish (splitting in stock)

fishing pools of different sizes (multiple rearing units)

Each fisherman chooses one strategy or another uzi and, accordingly, develops a business plan for growing fish. It is impossible not to focus on this issue, since further work to be carried out at YSTQ will depend on this business plan. It is also necessary to include in the fish farming plan only a strategy for the cultivation of fish without the introduction of the purchase of raw materials and materils.

Cultivation sequence: fish are selectively caught when they reach several different (age-size-different) brand sizes and are replaced by small fish (taking into account natural excrement). In this method, several problematic questions arise: a) catching fish from time to time causes a state of stress in the fish; b) slow - growing fish remain without catch, accumulate in the pool and share the bait; C) identifying a swarm of fish by size in the pool is a challenge.

Separation of a flock of fish: in this method, the fish chavag is carried out in a very large rush, and after they reach the size to be fed in the pool, half is allocated to the other pool. It also aims to prevent fish growth from stagnating in this method and to

Journal Zone Publishing, Ilford, United Kingdom

improve control over the number of fish. The method gives a very good effect if there is a channel for transferring fish from one pool to the second.

Fishing pools of different sizes: after the swarm of fish is compressed in the pool, it is transferred to another relatively large pool, and the vacated pool is transferred to the fish chavets in the corresponding number. The pool can be separated by screens depending on the size of the gangs, for example, the top of the rectangular pools can be separated by a screen for fish Chaves. They can be separated again as they begin to grow in development.

Conclusion

In order for the nutritional activity and health of fish to be easily observed at the water level, we recommend giving dry quality omukhta feed. Its size should correspond to the size of the fish. To maximize consumption and minimize waste, feed the largest omukhta that fish can easily swallow. Order only a limited amount to keep the feed fresh and store it in a cool, dry place, where there are no insects or rodents. In the event of a liability problem with contaminated feed, it is advisable, if necessary, to freeze small samples of each new batch of feed purchased for further analysis.

Literature

1. D.S. Niyozov “Baliq Bitmas Boylik” Toshkent – 2013. -192 b.
2. I.M. Mirabdullayev, U.T. Mirzayev “O`zbekiston va qo`shni hududlar baliqlari aniqlagichi” Toshkent - 2011. -25 b.
3. J.L.Laxanov “O’zbekistonning umurtqali hayvonlari aniqlagichi” Toshkent – 2013. -B 6-7.
4. M.O. Mavlyanov, N.J. Toshmanov, L.Sh. Sanayeva “ZOOLOGIYA (Umurtqasiz hayvonlar)” Toshkent “Voris-Nashriyot” 2013. -8 b.
5. S.Q.Husenov, D.S. Niyazov “Baliqchilik” O’zbekiston faylasuflar milliy jamiyati nashriyoti Toshkent 2013 y
6. Suvankulov Sh, Abduganiyev Z, “Baliqchilik gidroinshoatlari va mexanizatsiyalash”. Toshkent 2021 y
7. Niyozov D.S, G’afforov H.G’, “Baliqlarning oziqlanishi” darslik. Toshkent 2012y
8. Kamilov B.G, Xalilov I.I. “Yopiq suv ta’minotiqurilmalari O’zbekiston sharoitida baliq yetishtirishning istiqbolli tizimi sifatida”. Toshkent 2017 y
9. Azimkulovich Y.M. Baliqchilik ilmiy-tadqiqot institut “O’zbekistonning turli tipdagi suv havzalarida baliq maxsuldorligini oshirishning biologic asoslari” Toshkent 2019 y
10. Xolmirzayev D., Haqberdiyev P.S., Shohimardonov D.R., Shaptaqov E.S., “Baliqchilik asoslari” Toshkent – “ILM-ZIYO” 2016-y
11. https//uz.wikipedia.org/wiki/Baliqchilik
12. https://agro-olam.uz/Baliq-ozuqalari/

Journal Zone Publishing, Ilford, United Kingdom